Abstract

Software Engineering is a backbone of applying engineering principles in order to obtain software, which will run reliably and effectively. The global software industry suffer from the cost of software errors, not only to the procedures of the software but also to their customers and end users of software. The lack of quality of software produce a high cost of software products. Since in the mid-twentieth century, the development of software has grown exponentially, and many system technology in this days depend on it such that embedding system, Medical devices, flight reservation systems, and critical system. So software quality assurance (SQA) plays a key role in software development process, Software quality assurance methods include testing, inspection, formal method etc. And in the recent year, the governmental e-services has grown rapidly, many ministries and governmental institutes present their e-services on the web; and many turned over to computerized systems. The purpose of this paper is to measure the degree of applying software quality assurance practices in Palestinian government in order to identify areas of improvement to increase the efficiency development of it, and identify the weakness to enhance it. The focus of this paper is on measuring the testing and quality assurance procedure in Palestinian government, we deploy online survey to many ministries in Palestinian government. The survey focused on five major aspects of software quality assurance, namely SQA planning and infrastructure, testing methodologies and techniques, automated testing tools, software testing metrics, testing standards, and software testing training and education. Based on the survey results, we found
current practices in software quality assurance in government sector needs more development and interest from the country.

References

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Index Terms

Computer Science Software Engineering

Keywords

Software engineering  Software testing  Software quality assurance  SQA  survey